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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,748	12/06/2004	Hiroshi Sekiguchi	DAIN: 789	6935

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EXAMINER

DO, ROBERT C

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/516,748

Applicant(s)

SEKIGUCHI ET AL.

Examiner

Robert C. Do

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/6/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 through 4, 6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hori (U.S. Patent Number 6,348,993) in view of Mitani et al. (U.S. Patent Number 5,914,809).

Hori teaches the following claimed elements:

- A Fresnel lens sheet holding structure (Fig. 12G, 51) for holding a Fresnel lens sheet (Fig 7G, 6).
- A hanging member (6B) to be attached to the upper side of the Fresnel lens sheet (6).

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- A support member (13) for supporting the hanging member.
- A tensioning member (24) attached to at least the lower side of the Fresnel lens sheet (6).
- An elastic member (24) that pulls the tensioning member downward or laterally.
- The holding structure where a rigid sheet (7) is disposed adjacently to the exit surface of the Fresnel lens sheet (4).
- The rigid sheet is a lenticular lens sheet (7).
- A transmission screen (Fig. 1. 2) including the Fresnel lens sheet (6) holding structure (5).

Hori does not teach the following:

- A Fresnel lens sheet holding structure for holding a Fresnel lens sheet of 3mm or below in thickness.

However, Mitani et al teaches the following:

- A Fresnel lens sheet holding structure for holding a Fresnel lens sheet of 3mm or below in thickness (Column 8, line 37-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Fresnel lens sheet holder of Hori be able to hold a Fresnel sheet of 3mm or below in thickness as taught by Mitani et al. in order to have a greater variety in screen sizes.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hori and Mitani et al. as applied to claims above, and further in view of Inoue et al. (U.S. Patent Number 6,348,993).

Hori and Mitani et al. teach the claimed elements shown above.

Hori and Mitani et al. does not teach:

- A Fresnel lens sheet that has an exit surface provided with diffusing lenticular lenses.

However, Inoue et al. teaches:

- A Fresnel lens sheet (Fig. 3, A) that has an exit surface provided with diffusing lenticular lenses (B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Fresnel sheet of Hori to have lenticular lenses on the exit surface to have a greater contrast on the screen.

Claims 8, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hori and Mitani et al. as applied to claims above, and further in view of Sekiguchi (U.S Patent Number 6,961,176).

Hori and Mitani et al. teach the claimed elements shown above.

Hori and Mitani et al. does not teach:

- A Fresnel lens sheet that contains a dispersing agent that diffuses light
- A Fresnel lens sheet that is colored to absorb light
- A Fresnel lens sheet that has a light absorbing layer.

However, Sekiguchi teaches:

- A Fresnel lens sheet that contains a dispersing agent that diffuses light.
(Fig. 7, 15)
- A Fresnel lens sheet that is colored to absorb light (Column 3, lines 56-58).
- A Fresnel lens sheet that has a light-absorbing layer (Column 3, lines 58 and 59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to the Fresnel sheet Hori colored and contain a light absorbing layer to have a sharper image on the screen.

Claim 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hori and Mitani et al. as applied to claims, and further in view of Abe et al. (U.S Patent Number 6,307,675).

Hori and Mitani et al. teach the claimed elements shown above.

Hori and Mitani et al. does not teach:

- A Fresnel lens where a low reflection layer is formed on one of or both the surfaces of the Fresnel lens sheet.

However, Abe et al teaches:

- A Fresnel lens where a low reflection layer is formed on one of or both the surfaces of the Fresnel lens sheet (Column 9, lines 45-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a low reflection layer to the Fresnel sheet of Hori to have a better contrast on the screen.

Allowable Subject Matter

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Do whose telephone number is (571)272-1387. The examiner can normally be reached on Monday Through Friday, 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571)272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RCD



DIANE LEE
SUPERVISORY PATENT EXAMINER